



Bullet'n Backstory

Joint Munitions Command

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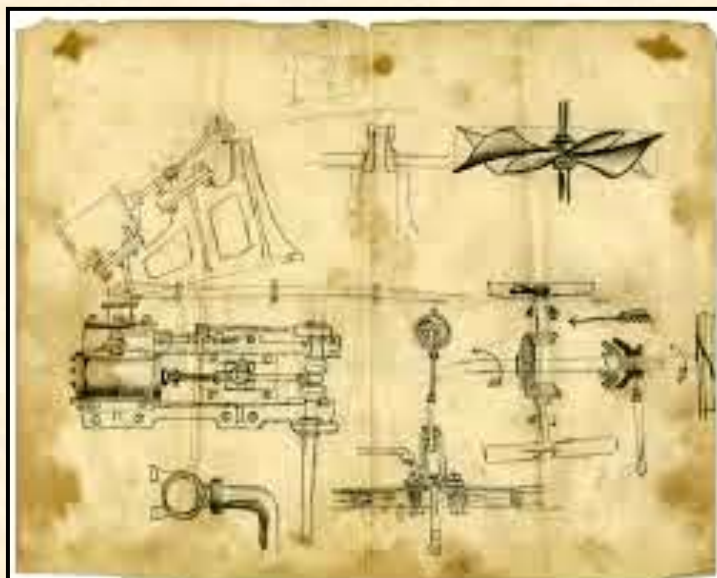
The Civil War Takes Flight?

The American Civil War was two years old when a man from Richmond, Virginia, offered the Confederacy what he thought would be the ultimate weapon: a flying war machine. Dr. R. Finley Hunt was a dentist, not an engineer, but that did not stop him from conceiving an elaborate steam-powered machine designed to take flight and drop bombs on the enemy. Hunt made his invention known in a letter to Confederate President Jefferson Davis, which included a request for financial support to build the machine. Davis sent the request to Gen. Robert E. Lee, who immediately forwarded the engineering plans to Col. Jeremy F. Gilmer, Chief of the Engineer Bureau, for review. Gilmer and his team concluded that the machine was too heavy, would not produce sufficient power, and could not fly. Dr. Hunt persisted, however, asking Davis to personally order armory resources to be used for the construction of a prototype. Hunt insisted that the negative response from the Engineer Bureau was a result of the Army engineers' lack of understanding of the concept. The Bureau countered that Hunt had a fundamental lack of understanding of the science involved and was not a serious engineer. Since that time, modern engineers have gone over Hunt's plans in some detail and concluded that the weight of the steam engine indicated in the design would have made it impossible for Hunt's machine to produce enough power to take flight. Nonetheless, President Davis remained interested in Hunt's idea. Ultimately, the flying machine plan was scrapped, more a result of cost than feasibility.

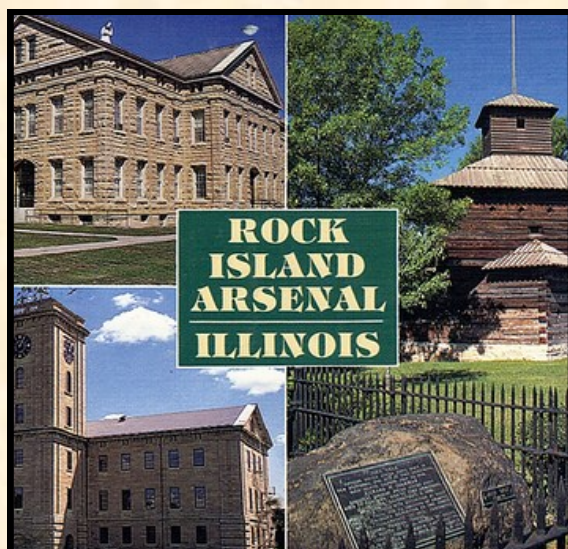
Dr. Hunt was not alone in looking to the skies as the future of war. Balloons would play a small role in Civil War operations, in some cases even for the bombardment of troops, but they were used primarily for reconnaissance. Like Hunt, other engineers dreamed of creating small, maneuverable, airborne machines to serve a role in the conflict. In January 1864, Richard Oglesby Davidson, a self-described inventor, used ads in newspapers throughout the South to appeal to the Quartermaster General's Office of the Confederate Army to support his *Artis Avis* or Bird Machine. This steam-powered "ornithopter" reputedly looked like an eagle, could go up to 100 miles per hour, and would have been capable of both shooting fire from its beak and bombarding troops, with the help of a trapdoor. According to Davidson, 1,000 of his machines in the air could drop more than 10,000 bombs per hour on the enemy. However, witnesses to Davidson's public presentations on the subject noted that the inventor invariably answered detailed questions about his machine with requests for funds to make his dream a reality. Further review suggests that the design was merely a variation of the "Great Steam Duck", which had been proposed in the 1840s as a joke. Another proponent of the flying machine concept was Edward Serrell. Before the Civil War, Serrell was a prominent civil engineer, working primarily on railroad and bridge designs. During the conflict, he became Chief Engineer of the Union Army of the James. In that capacity, he invented many useful items for the war, including iron viaducts and armor plating. In addition, he reportedly designed a "Valomotive" flying machine and came close to building a working prototype. Despite their efforts, none of these inventors would see their flying machines become reality, and the Civil War would conclude with only minimal efforts to reach the skies. ~ Dr. Paul-Thomas Ferguson, JMC Archivist



1841 image of the "Great Steam Duck"



Edward Serrell's Flying Machine



From the Archives

Rock Island Arsenal has an active history stretching back more than two hundred years. We can schedule historical tours for your group or office for either Quarters One or Rock Island Arsenal (driving, 45min; walking, 90min). Each tour is eligible for 1 CLP, with supervisor approval. If you are interested in a group tour, contact the JMC Research Library for scheduling: x20060.

This Month in Military History

November 4, 1944: British Gen. John Dill dies in Washington, D.C. and becomes the only foreign soldier to be buried at Arlington Cemetery.

November 11, 1918: Armistice in World War I. Observed as Armistice Day until 1978, when it is renamed Veteran's Day.

November 18, 1861: Julia Ward Howe writes The Battle Hymn of the Republic, sung to the tune of John Brown's Body (1852).

November 25, 1783: British troops leave New York City, their last post following the American Revolution.

Do you have historical items? If so, please contact the Archivist: Room 661
Dr. Paul-Thomas Ferguson - x20060 - paul.t.ferguson14.civ@mail.mil.